

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Shigeo YOSHII et al.

Serial No. 09/895,213

Filed: July 2, 2001

For: SEMICONDUCTOR LIGHT-EMITTING

DEVICE AND APPARATUS FOR

DRIVING THE SAME



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Attention: Applications Branch

Shigeo
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1302

PRELIMINARY AMENDMENT

Honorable Commissioner for Patents

Washington, D.C. 20231

Sir:

Please preliminary amend the above-identified application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 4, Paragraph 1

As an example of driving voltage applied during the light-emitting period, a voltage in a forward direction (forward bias voltage) is applied between the base layer 903 and the emitter layer 905 such that the base layer 903 and the collector layer 902 are set at an equal potential of 0 V.

Page 4, Paragraph 3 continuing on Page 5

During a light-extinct period, a voltage in a reverse direction (reverse bias voltage) is applied between the base layer 903 and the collector layer 902. This depletes substantially the entire region of the base layer 903, as shown in the energy-band diagram of FIG. 19, so that the holes confined to the active layer 904 are extracted to the collector layer 902. If the holes can be extracted from the active layer 904 with sufficiently high efficiency, the concentration of the holes in the active layer 904 is reduced so that the quantity of carriers recombined for light emission is reduced and light emission is suppressed. Since the hole extracted operation is not

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9/2

9/2